

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Cancelled)

Claim 9 (New) A polymer-supported Lewis acid catalyst comprising a Lewis acid group expressed by the following general formula (I):



wherein M represents a lanthanoid element, X represents an anionic group, and n is an integer representing the valence of M, said Lewis acid group being bonded to a polymeric chain via a SO₃ or SO₄ group.

Claim 10 (New) The polymer-supported Lewis acid catalyst comprising a Lewis acid group expressed by the following general formula (II):



wherein M represents a lanthanoid element, X represents an anionic group, n is an integer representing the valence of M, and R⁰ represents a SO₃ or SO₄ group, said Lewis acid group being bonded to a polymeric chain via a spacer chain.

Claim 11 (New) The polymer-supported Lewis acid catalyst according to claim 10, wherein the spacer chain is a hydrocarbon group.

Claim 12 (New) The polymer-supported Lewis acid catalyst according to claim 11, wherein the spacer chain is expressed by the following general formula (III):



wherein Ph represents a phenyl group, and m and l each represent an integer greater than or equal to 1.

Claim 13 (New) The polymer-supported Lewis acid catalyst according to any one of claims 9-12, wherein the polymeric chain comprises a polymer obtained by the addition polymerization of aromatic monomers.

Claim 14 (New) A method of organic synthesis using the polymer-supported Lewis acid catalyst according to any one of claims 9 to 12, wherein the reaction is performed in water or an aqueous medium.

Claim 15 (New) A method of organic synthesis using the polymer-supported Lewis acid catalyst according to claim 13, wherein the reaction is performed in water or an aqueous medium.

Claim 16 (New) The method of organic synthesis according to claim 14, which comprises the formation of a carbon-carbon bond.

Claim 17 (New) The method of organic synthesis according to claim 15, which comprises the formation of a carbon-carbon bond.

Claim 18 (New) The polymer-supported Lewis acid catalyst of claims 9 or 10, wherein x is a halogen atom or an organic acid group.

Claim 19 (New) The polymer-supported Lewis acid catalyst of claims 9 or 10, wherein x is a perfluoroalkyl sulfonate group.